WHAT IS CLAIMED IS:

1. An apparatus for reproducing information that has been digitally recorded on a storage medium, the apparatus comprising:

a first waveform equalizer, which equalizes a read signal corresponding to the information read out from the storage medium, thereby outputting a first equalized signal; and

a second waveform equalizer, which has an equalization characteristic different from that of the first waveform equalizer, outputs a second equalized signal and is selectively used to extract a read clock signal.

2. The apparatus of claim 1, wherein the second equalized signal is used exclusively for extracting the read clock signal and the information is not extracted from the second equalized signal.

3. The apparatus of claim 1, wherein the second waveform equalizer has such an equalization characteristic as to emphasize high-frequency components of an input signal more strongly than the first waveform equalizer does.

4. The apparatus of claim 1, further comprising:

a clock generator for outputting the read clock signal responsive to the second equalized signal; and

a decoder for generating digitized data from the first equalized signal.

5. The apparatus of claim 4, further comprising:

a phase shifter for shifting, responsive to a phase control signal, the phase of the read clock signal that has been output from the clock generator and outputting a phase-shifted read clock signal as a sampling clock signal;

an A/D converter for converting the first equalized signal into a digital read signal by sampling the first equalized signal by reference to the sampling clock signal that has been output from the phase shifter; and

a phase control signal generator for detecting a phase deviation of the sampling clock signal in accordance with the digital read signal that has been output from the A/D converter and outputting the phase control signal to the phase shifter so as to reduce the phase deviation of the sampling clock signal,

wherein the decoder generates the digitized data from the digital read signal that has been output from the A/D converter.

6. The apparatus of claim 4, wherein the decoder performs its decoding operation in accordance with a pattern of a digital read signal that has been obtained by sampling the first equalized signal.

7. The apparatus of claim 6, wherein the decoder operates in accordance with a PRML method.

8. The apparatus of claim 1, wherein the storage medium is an optical disk.